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ACTIVITY OF THE INTERNATIONAL INSTITUTE OF AGRICULTURE

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They are broadcast from Rome II (245.5 m.), Rome 2 RO 4 (25.4 m.) and Rome 2 RO 6 (19.6 m.).

The hour of broadcasts is Central European Time, which is one hour ahead of Greenwich Mean Time and 5 hours ahead of Eastern Standard Time in the United States.

The XVth General Assembly of the Institute. — As announced in the preceding number of this bulletin, the XVth General Assembly of the International Institute of Agriculture was held in Rome from May 20-23. The following countries had appointed their delegates to the Assembly: Union of South Africa, Germany, Argentina, Australia, Belgium, Belgian Congo, Burma, Brazil, Bulgaria, Canada, Chile, Colombia, Denmark, Egypt, Spain, Estonia, United States of America, Hawaii, Philippine Islands, Virgin Islands, Porto Rico, Finland, France, French West Africa, Algeria, Indo-China, Madagascar, Morocco, the Regency of Tunisia, Great Britain and Northern Ireland, Greece, Haiti, Hungary, India, Iran, Eire, Italy, Italian Colonies, Aegean Italian Islands, Japan, Latvia, Lithuania, Luxemburg, Mexico, Norway, Paraguay, the Netherlands, the Netherlands Indies, Peru, Poland, Portugal, Romania, San Marino, Sweden, Switzerland, Turkey, Uruguay, Venezuela, Yugoslavia. The majority of these delegations attended the meetings. Some international organizations, specially invited, were represented by observers.

The opening session took place on the morning of May 20 in the presence of H. M. the King of Italy and Albania, Emperor of Ethiopia. Baron Acerbo, President of the Institute, delivered the inaugural address, emphasising the importance of this Assembly held in spite of very grave circumstances, thus proving both the Institute's force and the interest of the adhering Governments in its activity.

Mr. Tassinari, Italian Minister of Agriculture and Forests, welcomed the delegations in the name of the Italian Government, and stressed the importance of the work of the Institute at the present moment.

Mr. Stewart and Mr. Laur, Members of the American and Swiss Delegations, spoke on behalf of all the Delegations present.

The Agenda of the Assembly called first for the discussion of some very important administrative and financial matters. All the necessary measures were taken to put the Institute in a position to carry on its work as efficiently as possible.

The President's general survey and the Secretary General's report on the work of the Bureaux gave the Assembly a very exact and complete idea of the Institute's activities during the course of the last two years and of the programme of work for the immediate future.

Attention is called to the very important resolution passed by the General Assembly concerning the part that the Institute must play in the work of economic reconstruction at the end of the present crisis.

The resolution reads as follows:

« The General Assembly:

convinced of the necessity that the International Institute of Agriculture assume a leading role in the reconstruction period following the present conflict with the aim of putting forward the position of agriculture as a major element of economic stabilization in the world,

gives mandate to the Permanent Committee to prepare a programme of collaboration with other international organizations, in view of economic reconstruction and,

to initiate as soon as possible such studies, as the resources of the Institute will permit, to provide basic facts which will be needed by reconstruction conferences concerned with world agriculture and international trade ».

A certain number of technical questions, such as *the international exchange of information on methods of improving agricultural production, the international problems of agricultural documentation, the legislative protection of plants, the special activity of the International Forestry Centre*, created by the Institute and located at Berlin, *soil conservation, the agricultural succession law, the best methods for the improvement of the conditions of small farmers*, gave the different delegations the opportunity to express their points of view, while at the same time enabling the Assembly to give the different bureaux precise directions as to the best means of improving or carrying out their work on such questions.

The *International Exhibition of agricultural films* was held during the General Assembly. This was the first time that an exhibition of this kind was held. The General Assembly expressed its satisfaction at this undertaking and made some suggestions which the Institute will take into account should another exhibition be held in the future. Further and more detailed information on this Exhibition will be found elsewhere in this bulletin.

The Session of the Permanent Committee of the Institute. — The second session of the Permanent Committee of the Institute in 1940, which according to the statutes was to have been held in June, took place on May 27, only a few days after the closing meeting of the General Assembly. This session of the Permanent Committee was attended by a large number of representatives of the adhering States. Administrative and financial measures were taken in order to ensure the continuation of the Institute's work for the coming months and to give the preliminary instructions concerning the putting into effect of the resolutions of the General Assembly. A more thorough examination of these resolutions will be made at the next meeting of the Permanent Committee on October 3, 1940.

The International Exhibition of Agricultural Films. — During the General Assembly several films which had received prizes in the International Competition of Agricultural Films, were shown in Rome. The many films entered dealt with agriculture under the aspect of elementary and higher agricultural instruction, the vocational training of farmers, and propaganda.

Films were selected first by the Organising Committee under the chairmanship of Mr. Marquis and composed of the delegates of all the countries participating in the competition, and then by a Jury presided by Mr. Bilbao and composed of Mr. Conti, Mr. Döring, Mr. Huguet and Mr. Müller, members, and Mr. Domini as secretary of the Jury and of the Organising Committee.

The films which received prizes numbered 29. The Royal Cup was assigned to an Italian film, the six first prizes *ex aequo* to German, French, English, American, Canadian and Italian films. Other prizes were assigned to Hungarian, Portuguese, Swiss, Mexican, Venezuelan, Latvian, Indochinese and Indian films.

The public presentation of these films confirmed the success of the initiative of the International Institute of Agriculture, and was rewarded by the highest approval and a vote of thanks to the Institute and to all those who had a part in its success at the closing meeting of the General Assembly.

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(November 1939 Edition)

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VILLA UMBERTO I

ROME (ITALY)

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Each volume contains the results of an enquiry, conducted on uniform lines in various countries, into the returns of farm accountancy. The work throws much light on some of the most difficult problems of agricultural policy and the development of agricultural industries.

IN THE PRESS:—

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XXIIIrd Year. About 1000 pages, 8vo.

PRICE: 100 lire (CLOTH 110 lire).

This work contains the results of the most extensive and most detailed enquiry hitherto made in the field of agricultural statistics. It is an indispensable work of reference for all studies relating to the production, marketing and prices of agricultural products. The volume now in preparation will include data available up to May 1940.

INTERNATIONAL BULLETIN OF PLANT PROTECTION

1940

No. 6

DISCOVERIES AND CURRENT EVENTS *

ITALIAN EAST AFRICA.

Plant Diseases Reported in 1939 †

Owing to the favourable season, wheat rusts (*Puccinia graminis tritici*, *P. glumarum tritici*, *P. rubigo-vera tritici*) the races of which have been studied for the last two years by Professor Cesare Sibilia, have caused serious damage to different indigenous and imported summer wheats, particularly in Scioa and Harar, and also in October and November, 1939.

Appreciable damage was also caused to broad beans by *Uromyces fabae*, to haricot beans by *U. appendiculatus*, and to native flax crops by *Melampsora lini*.

Barley rust (*P. anomala*) and crown rust of oats (*P. coronata*) were less serious, and were only frequent in certain zones (Olettà); the same may be said of the castor rust (*M. ricini*), rust of stone fruits (*Tranzschelia pruni-spinosae*), sunflower rust (*P. helianthi*).

Losses of economic importance in 1939 were caused by durra smuts, especially *Sphacelotheca sorghi* and *S. cruenta*.

Ustilago avenae, *U. hordei* and *U. tritici*, in order, although observed, were less important.

Among the Erysiphaceae, the most serious was *Oidium erysiphoides*, which was frequently found on green peas, lupins, broad beans, haricot beans and sesame.

Among the Bacteriaceae, *Pseudomonas malvacearum* was frequent, although only causing slight damage to cotton crops.

Of the non-parasitic diseases reported in Galla Sidama, some cases of sun scald on tea and leaf scorch on coffee, chiefly in unshaded plantations, and only a very few cases of black rust on cotton.

The following fungi were also reported on cultivated plants:—

Plasmopara viticola (Berk. and Curt.) Berl. and De Toni was observed on *Vitis europaea* in the neighbourhood of Addis Abeba.

* Under this and the next heading the countries are arranged in French alphabetical order.

† Communication from Dr. ANTONIO CICCARONE, Plant Pathology Section, 'Centro di sperimentazione agraria e zootecnica per l'A. O. I.', Government General of Italian East Africa, Addis Abeba, transmitted to the Institute by the Ministry for Italian Africa, Rome.

Taphrina deformans (Berk.) Tul. on *Prunus persica* in Scioa and Galla Sidama.

Mycosphaerella sp. on *Manihot glaziovii* in Galla Sidama.

Phyllachora eleusinis Speg. on *Eleusine coracana* in Galla Sidama.

Hemileia vastatrix Berk. and Br. on *Coffea arabica* in Galla Sidama.

Puccinia schweinfurthii (P. Henn.) P. Magn. on *Rhamnus prinoides* in Amara.

Aecidium rhamni Gmel. on *Rh. prinoides* in Scioa.

Phyllosticta manihot Speg. on *Manihot glaziovii* in Galla Sidama.

Phoma theicola Petch on *Thea sinensis* in Galla Sidama.

Septoria lycopersici Speg. on *Lycopersicum esculentum* in Scioa.

Sept. tritici Desm. on *Triticum* spp. in Scioa.

Colletotrichum gloeosporioides Penz. on *Citrus bigaradia* in Galla Sidama.

Pestalozzia theae K. Sawada on *Thea sinensis* in Galla Sidama.

Oidium leucoconium Desm. on *Prunus persica* in Scioa.

O. tabaci Thüm. on *Nicotiana tabacum* in Scioa.

Helminthosporium nodulosum Sacc. on *Eleusine coracana* in Galla Sidama.

On teff (*Eragrostis teff*), besides *Tilletia baldratii* (reported for the second time), the following fungi were observed for the first time:—

Mycosphaerella eragrostidis E. Cast. and Ciccar. in Galla Sidama.

Uromyces eragrostidis Tracy in Eritrea, Amara, Scioa and Galla Sidama.

Phoma depressitheca Bubak in Scioa.

Aposphaeria eragrostidis Ciccar. and E. Cast. in Galla Sidama.

Coniosporium sp. in Galla Sidama.

Cladosporium spp. found to a small extent practically everywhere.

Helminthosporium miyakei Nisikado in Galla Sidama.

Alternaria spp., light infestation everywhere.

The following new species and varieties were also reported:—

Meliola oleicola Doidge var. *jasmini* Ciccar. on *Jasminum abyssinicum* at Ciora, Galla Sidama.

Uncinula sibiliae Ciccar. on *Stereospermum kunthianum* at Giaio, Galla Sidama.

Gnomonia grewiae Ciccar. on *Grewia ferruginea* at Giamba, Galla Sidama.

Ophiobolus syzygii Ciccar. on *Syzygium guineense* at Didessa, Galla Sidama.

Phyllachora gondarensis Ciccar. on *Stephania abyssinica* at Bar Dar, Amara.

Masseella ciferrii Ciccar. on *Berchemia yemensis* at Adamitullo, Galla Sidama.

Phyllosticta gymnosporiae Ciccar. on *Gymnosporia* sp. at Bonga, Galla Sidama.

Phoma balanitis Ciccar. on *Balanites aegyptiaca* at Bolè, Scioa.

Septoria balanitis Ciccar. on *Bal. aegyptiaca* at Bolè, Scioa.

Sept. proteae Ciccar. on *Protea abyssinica* at Didessa, Galla Sidama.

Sept. syzygii Ciccar. on *Syzygium guineense* at Angareb, Amara.

Phleospora olettæ Ciccar. on *Loranthus* sp. at Olettà, Scioa.

Scolecosporium syzygii Ciccar. on *Syzygium guineense* à Omo Bottego, Galla Sidama.

The following diseases, many of which are new to Italian East Africa, were also reported in 1939:—

- Corynelia uberata* Fries on *Podocarpus gracilior*.
Mycosphaerella gardeniae Cooke on *Gardenia lutea*.
Leptosphaeria michottii (Westd.) Sass. on *Cyperus papyrus*.
Phyllachora bersamae Lingelsh. on *Bersama abyssinica*.
Phyll. cynodontis (Cacc.) Niessl. on *Cynodon* sp.
Endothiella albizziae (Syd.) Syd. on *Albizzia schimperiana*.
Hysterographium graminis Ell. and Ev. on *Hyparrhenia* sp.
Phakopsora erythraea Sacc. on *Stereospermum kunthianum*.
Ravenelia baumiana P. Enn. on *Cassia goratensis*.
Ravenelia sp. on *Acacia laeta*.
Hemileia gardeniae-thumbergiae (P. Henn.) on *Gardenia lutea*.
Hem. hansfordii Syd. on *Jasminum abyssinicum*.
Uromyces aloes (Cke.) P. Magn. on *Aloe* sp.
Ur. cluytiae Kalchbr. and Cooke on *Cluytia lanceolata*.
Ur. geranii (D.C.) Fries on *Geranium* sp.
Ur. hobsoni Vize on *Jasminum floribundum*.
Ur. illotus Arth. and Holw. on *Mucuna rubro-aurantiaca*.
Puccinia abyssinica (P. Henn.) Syd. on *Jasminum abyssinicum*.
Aecidium englerianum P. Henn. and Lindau on *Clematis wightiana* var. *glaucescens*.
Aec. schweinfurthii P. Henn. on *Acacia* sp.
Uredo fici Cast, var. *abyssinica* P. Henn. on *Ficus vallis-choudae*.
Tilletia heterospora (P. Henn.) Zundel on *Setaria* sp.
Graphiola phoenicis (Moug.) Poit. on *Phoenix reclinata*.
Sorosporium healdii Zundel on *Hyparrhenia* sp.
Ustilago linearis (Dozy and Molkenboer) Cif. on *Hyparrhenia cymbaria*.
Ust. vittata Berk. on *Oplismenus compositus*.
Phyllosticta divergens Sacc. on *Albizzia schimperiana*.
Phyll. heveae Zimm. on *Hevea brasiliensis*.
Phyll. stevensii Young on *Triumphetta* sp.
Phyll. visci (Sacc.) Allesch. on *Viscum* sp.
Darlucula filum (Biv.) Cast. on different uredo- and teleutosora.
Septoria rosae Desm. on *Rosa abyssinica*.
Pestalozzia caudata Syd. on *Cyperus papyrus*.
Pest. versicolor Speg. on *Protea abyssinica*.
Ovulariopsis erysiphoides Pat. and Hariot on *Erythrina* sp. and *Dodonaea viscosa*.
Oidium erysiphoides Fr. f. *cordiae* Sacc. on *Cordia abyssinica*.
Oidiopsis sicula Scalia on *Tropaeolum* sp.
Periconia pycnospora Fresen. on *Manihot glaziovii*.
Cercospora bauhiniae Syd. on *Bauhinia reticulata*.
Cerebella andropogonis Ces. on *Hyparrhenia rufa*.
Cer. paspali Cooke and Massee on *Cenchrus* sp.

SPAIN.

The Colorado Beetle in 1939 *

The presence of a few foci of *Leptinotarsa decemlineata* ('escarabajo de la patata', 'doriflora' or 'escarabajo del Colorado') in the Pyrenean zone bordering France was reported to the Ministry of Agriculture in 1939.

Up to the present, the damage caused is very slight due to the strict vigilance kept at the frontier, the prohibition of the importation of potatoes, their leaves, peelings, etc. from France since 1933 and the rapid measures taken on the first appearance of the Colorado beetle.

Postcards showing a reproduction of the insect have been issued and distributed in the frontier zones bordering France as also various bulletins to the farmers giving information on the pest and the control measures to be carried out, which consisted in burning of badly infested centres and arsenical spraying of the potato crops.

FRANCE.

Colorado Beetle, 1939 †

On the whole, no heavy invasion of the Colorado beetle (*Leptinotarsa decemlineata*) took place in 1939. In June, however, heavy invasions occurred in Brittany and Normandy and also along the Swiss frontier. Some swarms were noted at the end of May and later about June 10 and July 6.

Beyond the Vosges, where the beetle had crossed the previous years, contamination spread to a varying extent to all the cantons of Bas- and Haut-Rhin, and also to the territory of Belfort.

Invasion was fairly serious in the Haute-Saône, Doubs and Jura. To the south of the Rhone, the Dauphiné plain, infestation was relatively greater than previously and advance into the Alpine valleys had slightly increased. Little advance was made towards Provence. The departments of Alpes-Maritimes and Corsica have remained free of infestation.

SOUTHERN RHODESIA.

Locust Invasion, 1932-40 §

Monthly Report No. 87. February, 1940.

The campaign against the hopper stage of the red locust (*Nomadacris septemfasciata*) has continued during February in the districts mentioned in last month's report, and progress reports indicate that the native crops on the whole are being successfully protected.

* Communication from the Ministry of Agriculture, Madrid, Spain.

† Communication from Dr. JEAN FEYTAUD, Director of the Centre of Phytopathological Research for the South-West, Technical Adviser for the Control of the Colorado Beetle, Talence, Gironde, France.

§ Communication from the official correspondent of the Institute, Mr. RUPERT W. JACK, F. E. S., Chief Entomologist, Agricultural Laboratory, Department of Agriculture, Salisbury, Southern Rhodesia.

Heavy, extensive and continuous hatchings have occurred in the district of Mtoko, which is adjacent to the Mozambique border, and, according to native reports, similar conditions extend for a considerable distance over the border. Elsewhere the hatchings have been lighter.

In all the infested districts the situation is regarded as under control.

LEGISLATIVE AND ADMINISTRATIVE MEASURES

Germany. — By Police Ordinance, dated February 13, 1940, come into force April 1, 1940, the sale of toxic preparations relative to plant protection has been newly regulated.

Firstly, the meaning of 'toxic preparation for plant protection' is defined; in Appendix I these preparations are divided into three groups:—

Group 1: Combinations of arsenic, lead and mercury; nicotine and its compounds (except tobacco extract which does not contain more than 10 per cent. of nicotine and powder preparations not containing over 4 per cent. of nicotine); preparations evolving phosphuretted hydrogen with the exception of certain preparations placed in group 2.

Group 2: Chromic acid and combinations of same; fluorine compounds; nitrocresols and their compounds; preparations evolving phosphuretted hydrogen and not containing over 7 per cent. active combinations; grain bait, the content in strychnine nitrate not exceeding 0.5 per cent.

Group 3: Compounds of barium, cresols (except liquid preparations not containing over 1 per cent. cresol), oxalates, phenols (except preparations not containing more than 3 per cent. phenol, also carbolineums and emulsions with a phenol content not exceeding 10 per cent.), carbon sulphide, tobacco extract containing under 10 per cent. nicotine, zinc salts.

The containers used for the sale of toxic preparations should be strong and hermetically sealed, so that there is no possibility of leakage. They should be labelled as follows:—

- (a) name of product and maker;
- (b) caput mortuum with the word, 'poison' in the case of preparations included in groups 1 or 2;
- (c) warning 'use with care' for preparations of group 3;
- (d) exact indication of the contents, clearly showing the nature of the poison included.

Directions for use should also be given.

The indications (a) to (d) should be printed on the cover of the containers, in white letters on a black ground for preparations in group 1 or in red letters on a white ground for those included in groups 2 and 3.

The words 'poison' and 'use with care' should also be shown on the cover and on some other part of the container easily seen. The minimum size of the letters should not be less than 5 mm., and the *caput mortuum*, 10 mm. (minimum). The containers should not show any illustration or mark other than the maker's trade-mark and the official symbol of authorized control preparations.

Preparations containing lead should carry the warning that their use in viticulture is prohibited.

Poisonous products with no characteristic natural colour should be tinted a distinctive colour: green for arsenical products, blue or red for mercurial preparations, blue or violet for fluorine products.

The products utilized for seed disinfection should contain a colouring matter which shows on the treated seeds.

Grain rendered toxic with strychnine should be tinged dark red.

Toxic products can only be obtained from pharmacies and drug stores authorized to sell poisons.

The proprietors or managers of fertilizer and seed stores, agricultural or horticultural cooperatives, etc. may obtain a sales permit for poisons, after passing a special examination before the Public Health authorities.

Poisonous products should be kept in a special room or in a cupboard or box placed away from food products and fodder. Notices should be posted to this effect.

The products used in control operations can only be supplied to persons giving a guarantee that the said products will only be used for the purpose indicated and that the necessary precautions will be observed. It is prohibited to supply these products to children under 14 years.

The seller may request the customer to present his permit for the purchase of agricultural toxic preparations; an example of this permit is appended to the present Ordinance.

All sales must be entered in a special register, an example of which is also given as an annexe to the present Ordinance. (*Reichgesetzblatt*, Teil I, Berlin, 16. Februar 1940, Nr. 29, S. 349-353).

* * The new edition of police regulations ('*Polizeivorschriften*') published by the German Railway Union includes, in consequence of the changed situation since March 1, 1940, a list of the police ordinances relative to the transport of plants (home and foreign transport). (*Nachrichtenblatt für den Deutschen Pflanzenschutzdienst*, Berlin, Anfang April 1940, 20. Jahrg., Nr. 4, S. 22).

* * By Ministerial Order of March 14, 1940, based on the Decrees of March 28, 1929 and September 30, 1932 [see this *Bulletin*, 1939, No. 6, p. 83; 1932, No. 12, p. 205] with a view to preventing the introduction of the carnation leaf roller [*Tortrix pronubana*] the importation of carnations (cut flowers) is authorized up to April 30, 1940. (*Ibid.*).

*** By Ordinance of March 28, 1940, the Minister of Agriculture exempts fruits sent from abroad by post from inspection for the San José scale [*Aspidiotus perniciosus*] provided that these fruits are dispatched as a gift to the consignee and intended for consumption by same. (*Ibid.*).

*** A research station ('Kartoffelkäfer-Forschungsstation') for work on the Colorado beetle [*Leptinotarsa decemlineata*] has been established at Krufth near Andernach, Mayen district, Rhine Province, Prussia, under the control of the 'Biologische Reichsanstalt für Land-und Forstwirtschaft', Berlin-Dahlem. This new station will specialize in the study of the biology of the Colorado beetle with a view to organizing, improving and simplifying control measures. Special attention will be given to continuing the experiments carried out during 1936-39 by the Franco-German Station at Ahun, Creuse, France, on the resistance of wild potato plants to the Colorado beetle and on crossing these wild forms with cultivated varieties, and on the insecticides utilizable in the chemical control of this insect. (*Ibid.*, Anfang Mai 1940, Nr. 5, S. 25).

Germany (Eastern Marche). — By a Circular of January 19, 1940, the Minister of Agriculture gives instructions on the application of the Decree of November 21, 1939, relative to the control of the San José scale [*Aspidiotus perniciosus*], [see this *Bulletin*, 1940, No. 5, p. 103].

Any one having fruit trees and other trees and shrubs, which according to the official Plant Protection Service are infested or likely to be infested by the San José scale is required to destroy the trees and shrubs in question if other control measures do not appear to be indicated or if there is serious danger of infestation spreading.

In certain districts which will be delimited by the authorities, those concerned are obliged, during the winter season, to treat their fruit trees, and if necessary, also other trees and shrubs, with preparations authorized by the Plant Protection Service and in accordance with the instructions of an official sent by this Service.

This latter prescription also applies to all usufructuaries of horticultural nurseries in any district. (*Amtliche Pflanzenschutzbestimmungen*, Berlin, 1. Februar 1940, Bd. XII, Nr. 1, S. 10-11).

England and Wales. — In view on the existence of Colorado beetle [*Leptinotarsa decemlineata*] in Spain, by the Importation of Plants (Amendment) Order, 1940, restrictions have been placed upon the landing in England and Wales of Spanish-grown plants, potatoes, raw vegetables and cider apples. (*The Gardeners' Chronicle*, London, April 27, 1940, Third Series, Vol. CVII, No. 2783, p. 195).

*** With the object of preventing the introduction of the cherry fruit fly [*Rhagoletis cerasi*], the Importation of Raw Cherries Order of 1940, dated May 3, 1940, regulates the importation of cherries grow in Spain, France, Italy and Hungary during the 1940 season. (*Statutory Rules and Orders*, 1940, No. 648, London, 1940, 4 pp.).

Australia (South Australia). — The Act No. 19 assented to November 22, 1939, and which may be cited as the 'Noxious Weeds Act Amendment Act, 1939' amends the Noxious Weeds Act, 1931-1938. (*Anno tertio Georgii VI Regis. A. D. 1939, Adelaide, 1939, 2 pp.*).

Australia (New South Wales). — By Regulation 51 of November 8, 1939, no person shall move or allow or cause to be moved out of any land declared to be a quarantine area on account of the presence or suspected presence of American maize smut (*Ustilago zeae*), any maize or maize plant unless a permit in writing for such movement has first been issued by an inspector. No person shall plant or allow or cause to be planted any maize on any land within a quarantine area unless a permit in writing for such planting has first been issued by an inspector. (*New South Wales. Regulation. Plant Diseases Act, 1924. Sydney, 1939, 1 p.*).

Belgium. — A Ministerial Decree of April 15, 1940 lays down the terms governing the collaboration of the National Office for the marketing of agricultural and horticultural products with the official Phytopathological Service in regard to the sanitary inspection of plant products. (*Moniteur Belge, Bruxelles, 20 avril 1940, 110^e année, n^o III, p. 2416*).

France. — A Ministerial Decree of April 1, 1940 delimits the zones contaminated by the Colorado beetle [*Leptinotarsa decemlineata*] and the protection zones. (*Journal officiel de la République française. Paris, 23 avril 1940, LXXII^e année, n^o 102, p. 2957-2960*).

India. — By Notification No. F. 46-20/38-A of December 6, 1939, in rule 12 of the Order published with the Notification No. F. 320-35-A of July 20, 1936 [see this *Bulletin*, 1937, No. 5, pp. 93-95], after the words 'produced in India', the words 'or in Burma' shall be inserted.

The Fourth Schedule annexed to the said Order is substituted by another and the Fifth Schedule is amended. (*The Indian Journal of Agricultural Science, New Delhi, February, 1940, Vol. X, Pt. I, p. 98*).

* * By Notification No. F. 50-33/39-A of December 7, 1939, in paragraph 4 of the Order above mentioned, for the words 'potatoes and sugarcane' the words 'potatoes, sugarcane and unmanufactured tobacco, either raw or cured', shall be substituted.

Paragraph 8 shall be re-numbered as paragraph 8 A, and after that paragraph as so re-numbered the following paragraph shall be inserted, namely:—

'8B. Unmanufactured tobacco, either raw or cured, shall not be imported into British India, unless, in addition to the general certificate required under rule 5, it is accompanied by an official certificate, that it is free from *Ephesthia elutella* or that the pest does not exist in the country of origin'. (*Ibid.*, p. 99).

Italy. — Ministerial Circular No. 469 of February 22, 1940 relative to the control of the downy mildew of the vine [*Plasmopara viticola*] gives instructions for the economic use of copper preparations by means of suitable sprayers. (*Bollettino Ufficiale del Ministero dell'Agricoltura e delle Foreste*, Roma, 1^o aprile 1940, anno XII, n. 10, pp. 455-457).

*** Two Royal Decrees Nos. 197 and 198 of February 29, 1940 ratify the curricula for the the biennial courses to be held at the Agricultural Section of Technical Institute for colonial agriculture, attached to the Royal Agonomic Institute for Italian Africa [see this *Bulletin*, 1940, No. 3, pp. 57-58]. (*Gazzetta Ufficiale del Regno d'Italia*, Roma, 11 aprile 1940, anno 81^o, n. 86, pp. 1302-1315).

** By Ministerial Decree of April 22, 1940, a competition on the basis of qualifications and written examinations was opened for the award of twelve scholarships for advanced study in plant pathology and agricultural entomology at the Royal Institutes of Phytopathological Research and Experimentation and at the Royal Observatories for Plant Diseases. (*Ibid.*, 7 maggio 1940, n. 107, p. 1684).

Switzerland. — A Decree of the Federal Council, dated February 16, 1940, modifying the Decree of the Federal Council of April 17, 1938 [see this *Bulletin*, 1938, No. 8, p. 176] in regard to the control of the potato wart disease [*Synchytrium endobioticum*] and the Colorado beetle [*Leptinotarsa decemlineata*] lays down that as a general rule the Confederation will reimburse to the canton and the communes two-thirds of the expenses incurred in the control of the potato wart disease and the Colorado beetle, if control measures were carried out by order of the Agricultural Division of the Federal Department of Public Economy.

Moreover, the Confederation may: (a) reduce, by means of a subsidy, the selling price of the products required for the compulsory treatment against the Colorado beetle; (b) grant a subsidy of 20 per cent. (maximum), 40 per cent. (maximum) in the mountain areas, in order to facilitate the purchase of the machinery and apparatus employed in the control of the Colorado beetle.

The Department of Public Economy may authorize the Agricultural Division to fix and to limit the amount of compensation to be given for the destruction of infested crops or harvests.

In regard to interdiction of potato cultivation on land contaminated by wart disease, no compensation is allowed. (*Recueil des lois fédérales*, Berne, 21 février 1940, tome 56, n^o 8, p. 181-182).

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